


# TRAITE DE COOPERATION EN MATIERE DE BREVETS

## PCT

### RAPPORT D'EXAMEN PRELIMINAIRE INTERNATIONAL (article 36 et règle 70 du PCT)

Référence du dossier du déposant ou du mandataire	<b>POUR SUITE A DONNER</b> voir la notification de transmission du rapport d'examen préliminaire international (formulaire PCT/PEA/416)	
Demande internationale No. PCT/FR 03/03132	Date du dépôt international ( <i>jour/mois/année</i> ) 22.10.2003	Date de priorité ( <i>jour/mois/année</i> ) 15.11.2002
Classification internationale des brevets (CIB) ou à la fois classification nationale et CIB H04N7/30		
Déposant TELEDIFFUSION DE FRANCE et al.		
<p>1. Le présent rapport d'examen préliminaire international, établi par l'administration chargée de l'examen préliminaire international, est transmis au déposant conformément à l'article 36.</p>		
<p>2. Ce RAPPORT comprend 4 feuilles, y compris la présente feuille de couverture.</p> <p><input type="checkbox"/> Il est accompagné d'ANNEXES, c'est-à-dire de feuilles de la description, des revendications ou des dessins qui ont été modifiées et qui servent de base au présent rapport ou de feuilles contenant des rectifications faites auprès de l'administration chargée de l'examen préliminaire international (voir la règle 70.16 et l'instruction 607 des Instructions administratives du PCT).</p> <p>Ces annexes comprennent feuilles.</p>		
<p>3. Le présent rapport contient des indications et les pages correspondantes relatives aux points suivants :</p> <p>I <input checked="" type="checkbox"/> Base de l'opinion</p> <p>II <input type="checkbox"/> Priorité</p> <p>III <input type="checkbox"/> Absence de formulation d'opinion quant à la nouveauté, l'activité inventive et la possibilité d'application industrielle</p> <p>IV <input type="checkbox"/> Absence d'unité de l'invention</p> <p>V <input checked="" type="checkbox"/> Déclaration motivée selon la règle 66.2(a)(ii) quant à la nouveauté, l'activité inventive et la possibilité d'application industrielle; citations et explications à l'appui de cette déclaration</p> <p>VI <input type="checkbox"/> Certains documents cités</p> <p>VII <input type="checkbox"/> Irrégularités dans la demande internationale</p> <p>VIII <input type="checkbox"/> Observations relatives à la demande internationale</p>		
Date de présentation de la demande d'examen préliminaire internationale  17.05.2004	Date d'achèvement du présent rapport  21.07.2004	
Nom et adresse postale de l'administration chargée de l'examen préliminaire international   Office européen des brevets D-80298 Munich Tél. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Fonctionnaire autorisé  Schneiderlin, J  N° de téléphone +49 89 2399-7400	



## Demande internationale n° PCT/FR 03/03132

**RAPPORT D'EXAMEN  
PRÉLIMINAIRE INTERNATIONAL**

Demande internationale n° PCT/FR 03/03132

5. ☐ Le présent rapport a été formulé abstraction faite (de certaines) des modifications, qui ont été considérées comme allant au-delà de l'exposé de l'invention tel qu'il a été déposé, comme il est indiqué ci-après (règle 70.2(c)) :

*(Toute feuille de remplacement comportant des modifications de cette nature doit être indiquée au point 1 et annexée au présent rapport.)*

6. Observations complémentaires, le cas échéant :

**V. Déclaration motivée selon l'article 35(2) quant à la nouveauté, l'activité inventive et la possibilité d'application industrielle; citations et explications à l'appui de cette déclaration**

1. Déclaration			
Nouveauté	Oui:	Revendications	1-14
	Non:	Revendications	
Activité inventive	Oui:	Revendications	1-14
	Non:	Revendications	
Possibilité d'application industrielle	Oui:	Revendications	1-14
	Non:	Revendications	

2. Citations et explications

**voir feuille séparée**

**Concernant le point V**

**Déclaration motivée quant à la nouveauté, l'activité inventive et la possibilité d'application industrielle; citations et explications à l'appui de cette déclaration**

Il est fait référence au document suivant:

D1: FR-A-2 769 453 (TELEDIFFUSION FSE) 9 avril 1999 (1999-04-09)

Le document **D1**, qui est considéré comme étant l'état de la technique le plus proche de l'objet de la revendication 1, décrit (les références entre parenthèses s'appliquent à ce document) un procédé de mesure des dégradations d'une image numérisée, introduites par un codage de l'image consistant à décomposer l'image en blocs de codage suivant une grille de codage et à appliquer sur des données de pixels de chaque bloc un traitement de codage faisant intervenir un calcul de transformée par blocs et un calcul de transformée par bloc inverse (voir abrégé) consistant à appliquer un calcul de transformée par bloc aux données de pixels de l'image codée en utilisant une grille de codage décalée pour obtenir des coefficients transformés pour chaque bloc d'analyse défini par la grille de codage décalée pour déterminer une mesure de dégradation de l'image à partir d'indicateurs de dégradation (voir page 22 ligne 19 à page 23 ligne 11).

Par conséquent, l'objet de la revendication 1 diffère de ce procédé connu en ce que l'on détermine la grille de codage de l'image codée, afin de retrouver la décomposition en blocs de codage de l'image, utilisée lors du codage de l'image et l'on décale la grille de codage par rapport à l'image codée, de manière à définir une décomposition de l'image en blocs d'analyse couvrant chacun une frontière entre deux blocs de codage adjacents.

Un tel procédé pour mesurer des dégradations d'une image numérisée n'est ni divulgué ni rendu évident par les autres documents cités des le rapport de recherche.

Les revendications 2-14 dépendent de la revendication 1 et satisfont donc également, en tant que telles, aux conditions requises par le PCT en ce qui concerne la nouveauté et l'activité inventive.

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(article 36 and regulation 70 of PCT)

Applicant or authorised representative file reference	<b>FOR SUBSEQUENT ACTION</b>		See international preliminary examination report transmission notification (form PCT/IPEA/416)																								
International application No. PCT/FR 03/03132	International filing date ( <i>day/month/year</i> ) 22.10.2003	Priority date ( <i>day/month/year</i> ) 15.11.2002																									
International patent classification (IPC) or both national classification and IPC H04N7/30																											
Applicant TELEDIFFUSION DE FRANCE et al.																											
<p>1. This international preliminary examination report, drafted by the international preliminary examining authority, is forwarded to the applicant in accordance with article 36.</p> <p>2. The REPORT comprises 4 pages, including this cover page.</p> <p><input type="checkbox"/> It is accompanied by APPENDICES, i.e. pages of the disclosure, claims or figures which have been amended and have been used as a basis for this report or pages containing corrections made for the authority in charge of the international preliminary examination (see regulation 70.16 and instruction 607 of the administrative instructions of the PCT).</p> <p>These appendices comprise _____ pages.</p>																											
<p>3. This report contains indications relating to the following points:</p> <table border="0"> <tr> <td>I</td> <td><input checked="" type="checkbox"/></td> <td>Basis of report</td> </tr> <tr> <td>II</td> <td><input type="checkbox"/></td> <td>Priority</td> </tr> <tr> <td>III</td> <td><input type="checkbox"/></td> <td>No formulation of opinion with respect to novelty, inventive activity and possibility of industrial application</td> </tr> <tr> <td>IV</td> <td><input type="checkbox"/></td> <td>No invention unit</td> </tr> <tr> <td>V</td> <td><input checked="" type="checkbox"/></td> <td>Justified statement according to regulation 66.2 (a) (ii) with respect to novelty, inventive activity and possibility of industrial application; references and explanations to support this statement</td> </tr> <tr> <td>VI</td> <td><input type="checkbox"/></td> <td>Certain reference documents</td> </tr> <tr> <td>VII</td> <td><input type="checkbox"/></td> <td>Irregularities in international application</td> </tr> <tr> <td>VIII</td> <td><input type="checkbox"/></td> <td>Observations relating to international application</td> </tr> </table>				I	<input checked="" type="checkbox"/>	Basis of report	II	<input type="checkbox"/>	Priority	III	<input type="checkbox"/>	No formulation of opinion with respect to novelty, inventive activity and possibility of industrial application	IV	<input type="checkbox"/>	No invention unit	V	<input checked="" type="checkbox"/>	Justified statement according to regulation 66.2 (a) (ii) with respect to novelty, inventive activity and possibility of industrial application; references and explanations to support this statement	VI	<input type="checkbox"/>	Certain reference documents	VII	<input type="checkbox"/>	Irregularities in international application	VIII	<input type="checkbox"/>	Observations relating to international application
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VIII	<input type="checkbox"/>	Observations relating to international application																									
International preliminary examination application submittal date 17.05.2003		Report completion date 21.07.2004																									
Name and postal address of international preliminary examining authority European patent office D-80298 Munich Tel. (+49-89) 2399 - 0 Tx: 523656 epmu d Fax: (+49-89) 2399 - 4465		Authorised official  Schneiderlin, J  Telephone No. (+49-89) 2399 7400																									

Form PCT/IPEA/409 (cover page) (January 2004)

I. Basis of report

1. Concerning **elements** of the international application (*replacement sheets that were submitted to the receiving office in response to an invitation made in accordance with article 14 are considered in this report as being "initially deposited" and are not attached to the report as an appendix since they do not contain any modifications*) (Regulations 70.16 and 70.17):

Disclosure, pages:

1-14 as initially deposited

Claims, No.:

1-14 as initially deposited

Figures, sheets:

1/3-3/3 as initially deposited

2. Concerning the language, all elements mentioned above were available to the Authority or were submitted to the Authority in the language in which the International Application was deposited, unless mentioned otherwise under this point.

These elements were also available to the Authority or were submitted to the Authority in the following language: that is:

- ☐ the language of a translation submitted for the purposes of the international search (according to regulation 23.1 (b)),
- ☐ the language in which the international application was published (according to regulation 48.3 (b)),
- ☐ the language of the translation submitted for the purposes of the international preliminary examination (according to regulation 55.2 or 55.3).

3. Concerning nucleotide or amino acid sequences divulged in the international application (if applicable), the international preliminary examination was carried out based on the listing of sequences:

- ☐ contained in the international application, in written form
- ☐ deposited with the international application, in a form that can be decrypted by computer,
- ☐ submitted to the Authority later, in written form,
- ☐ submitted to the Authority later, in a form that can be decrypted by computer,
- ☐ The declaration, according to which the listing of sequences in writing and supplied later does not go beyond the data divulged in the application as deposited, was provided,
- ☐ The declaration, according to which the information recorded in a form that can be decrypted by computer is identical to the listings of sequences in this document in writing, was provided,

4. The modifications cancelled:

- ☐ in the disclosure, pages:
- ☐ in the claims, numbers:
- ☐ in the figures, sheets:

5. ☐ This report was formulated making abstraction (of some) of the modifications, that were considered as going beyond the presentation of the invention as deposited, as mentioned below (regulation 70.2(c)):

*(Any replacement sheet containing this type of modification must be indicated in point 1 and attached to this report).*

6. Complementary observations if applicable:

**V. Justified statement according to regulation 35(2) with respect to novelty, inventive activity and the possibility of industrial application; references and explanations to support this statement**

- |                                       |      |        |      |
|---------------------------------------|------|--------|------|
| 1. Declaration                        |      |        |      |
| Novelty                               | Yes: | Claims | 1-14 |
|                                       | No:  | Claims |      |
| Inventive activity                    | Yes: | Claims | 1-14 |
|                                       | No:  | Claims |      |
| Possibility of industrial application | Yes: | Claims | 1-14 |
|                                       | No:  | Claims |      |

2. References and explanations

**See separate sheet**

Concerning point V

**Justified statement with respect to novelty, inventive activity and the possibility  
of industrial application; references and explanations to support this statement**

...

The following document is referred to:

D1: FR-A-2 769 453 (TELEDIFFUSION FSE), April 9 1999 (1999-04-09)

Document D1, considered as describing the state of the art closest to the subject of claim 1, describes a method for measuring degradations of a digitised image (references between parentheses apply to this document) introduced by image coding consisting of breaking down the image into coding blocks using a coding grid and applying coding processing on pixel data in each block, making use of a block transform calculation and an inverse block transform calculation (see abstract) consisting of applying a block transform calculation to the pixel data in the coded image using an offset coding grid to obtain transformed coefficients for each analysis block defined by the offset coding grid to determine an image degradation measurement making use of degradation indicators (see page 22, line 19 to page 23 line 11).

Consequently, the subject of claim 1 is different from this known method in that the coding grid of the coded image is determined so as to find the breakdown of the image into coding blocks, used when coding the image and the coding grid is offset from the coded image so as to define a breakdown of the image into analysis blocks each covering a boundary between two adjacent coding blocks.

This type of method for measuring degradations of a digitised image is not divulged or made evident by reading the other documents mentioned in the search report.

Claims 2 - 14 are dependent on claim 1 and therefore as such also satisfy conditions required by the PCT related to novelty and inventive activity.



Translation

PATENT COOPERATION TREATY

PCT

PCT/FR2003/003132



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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference BdR/BR 60911	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/FR2003/003132	International filing date ( <i>day/month/year</i> ) 22 octobre 2003 (22.10.2003)	Priority date ( <i>day/month/year</i> ) 15 novembre 2002 (15.11.2002)
International Patent Classification (IPC) or national classification and IPC H04N 7/30		
Applicant TDF		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 4 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of \_\_\_\_\_ sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability: citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 17 mai 2004 (17.05.2004)	Date of completion of this report 21 July 2004 (21.07.2004)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/FR2003/003132

## I. Basis of the report

## 1. With regard to the elements of the international application:\*

- ☐ the international application as originally filed
- ☒ the description:  
pages \_\_\_\_\_ 1-14 \_\_\_\_\_ . as originally filed  
pages \_\_\_\_\_ . filed with the demand  
pages \_\_\_\_\_ . filed with the letter of \_\_\_\_\_
- ☒ the claims:  
pages \_\_\_\_\_ 1-14 \_\_\_\_\_ . as originally filed  
pages \_\_\_\_\_ . as amended (together with any statement under Article 19  
pages \_\_\_\_\_ . filed with the demand  
pages \_\_\_\_\_ . filed with the letter of \_\_\_\_\_
- ☒ the drawings:  
pages \_\_\_\_\_ 1/3-3/3 \_\_\_\_\_ . as originally filed  
pages \_\_\_\_\_ . filed with the demand  
pages \_\_\_\_\_ . filed with the letter of \_\_\_\_\_
- ☐ the sequence listing part of the description:  
pages \_\_\_\_\_ . as originally filed  
pages \_\_\_\_\_ . filed with the demand  
pages \_\_\_\_\_ . filed with the letter of \_\_\_\_\_

## 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

## 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/fig \_\_\_\_\_

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.  
PCT/FR 03/03132

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

Novelty (N)	Claims	1-14	YES
	Claims		NO
Inventive step (IS)	Claims	1-14	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-14	YES
	Claims		NO

### 2. Citations and explanations

Reference is made to the following document:

D1: FR-A-2 769 453 (TELEDIFFUSION FSE) 9 April 1999  
(1999-04-09).

Document **D1**, which is considered to be the prior art closest to the subject matter of claim 1, describes (the references between parentheses apply to said document) a method for measuring image degradations in a digitised image, said degradations being caused by an image encoding process that consists of breaking the image down into encoding blocks in accordance with an encoding grid and carrying out an encoding processing step on pixel data in each block by calculating a block transform and an inverse block transform (see the abstract), wherein a block transform calculation is applied to the pixel data in the encoded image by using an offset encoding grid to generate transformed coefficients for each analysis block defined by said offset encoding grid in order to measure image degradation on the basis of degradation indicators (see page 22, line 19 to page 23, line 11).

It follows that the subject matter of claim 1 differs from

this known method in that the encoding grid for the encoded image is determined in order to identify the breakdown of the image into encoding blocks that was used during image encoding, and in that the encoding grid is offset relative to the encoded image, in such a way as to determine the breakdown of said image into analysis blocks, each of which covers a boundary between two adjacent encoding blocks.

No such method for measuring image degradations in a digitised image is disclosed in, or obvious from, the other documents cited in the search report.

Claims 2-14 are dependent on claim 1 and, as such, therefore also fulfil the PCT requirements of novelty and inventive step.

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